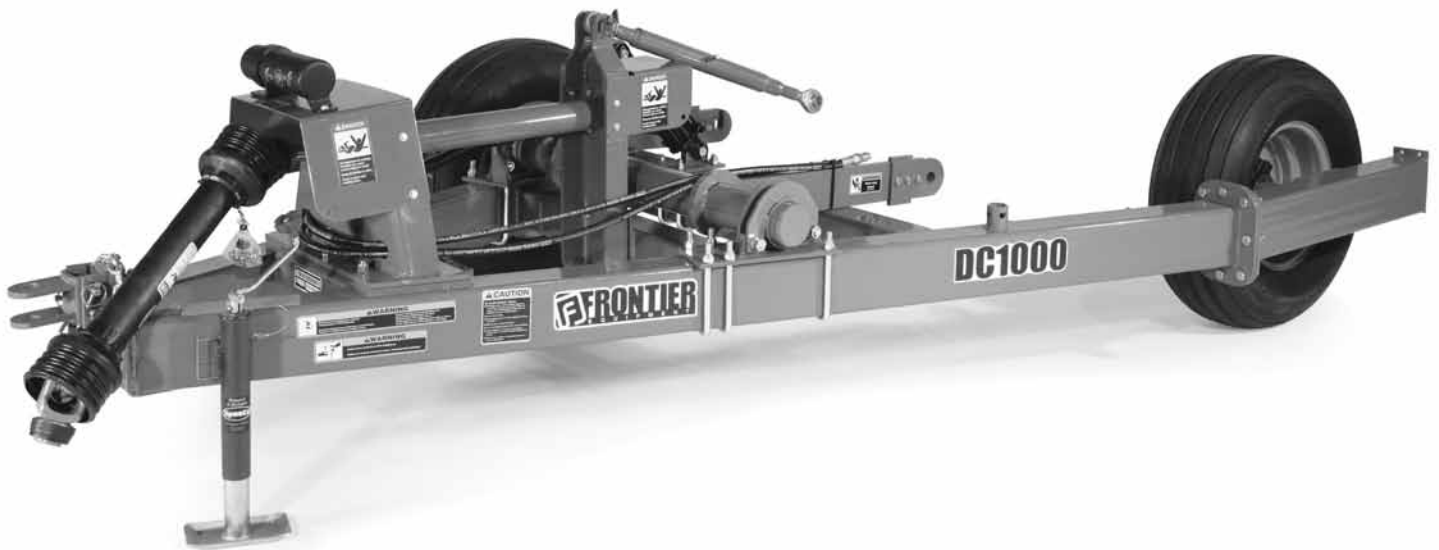


OPERATOR'S MANUAL

DISC/MOWER CADDY

DC1000



DEALER PREPARATION CHECK LIST

Frontier DC1000 Series Disc/Mower Caddy

THIS CHECKLIST IS TO REMAIN IN OWNER'S MANUAL

It is the responsibility of the dealer to complete the procedures listed below, then review this checklist with the customer upon the delivery or the sale of this implement.

- | | |
|---|---|
| <input type="checkbox"/> 1. Implement is completely assembled. | <input type="checkbox"/> 5. All decals in place and readable. (See page 8 - 9) |
| <input type="checkbox"/> 2. All drivelines, bearings, and grease zerks are properly lubricated. (See page 23) | <input type="checkbox"/> 6. Overall condition good (i.e. paint, welds, hydraulic hoses) |
| <input type="checkbox"/> 3. All shields in place and in good condition. | <input type="checkbox"/> 7. Operator's manual has been given to owner and the owner has been instructed on the safe and proper use of the Disc/Mower Caddy. |
| <input type="checkbox"/> 4. Check PTO driveline. Make sure it is the correct length to operate caddy with intended tractor. | |

Dealer's Signature _____

Purchaser's Signature _____

Safety



IMPORTANT SAFETY MESSAGE FOR OWNERS/OPERATORS OF MOWER CADDIES



Safety is a primary concern in the design, manufacture, sale, and use of mower caddies. As manufacturers of mower caddies, we want to confirm to you, our customers, our concern for safety. We also want to remind you about the simple, basic, and common sense rules of safety when using a mower caddy. Failure to follow these rules can result in severe injury or death to operators or bystanders.

It is essential that everyone involved in the assembly, operation, transport, maintenance, and storage of this equipment be aware, concerned, prudent, and properly trained in safety. The majority of accidents involve entanglement on the driveline or thrown objects. These risks become greater when you do not use proper shielding specified by the manufacturer.

Our current production machines include, as standard equipment, guards or shields for drivelines and input shafts, safety signs and operators manuals. If you have an older machine which does not have current standard safety equipment, please contact your dealer about bringing your machine up to the current level of safety.

Below are some of the most important safety rules to be understood and followed by anyone who works with mower caddies:

Before operating a mower caddy, an operator must read and understand all the information in the owner's manual and in the safety signs attached to the product. A person who has not read or understood the owner's manual and safety signs is not qualified to operate the unit. Accidents occur often on machines that are loaned or rented to someone who has not read the owner's manual and is not familiar with the equipment. If you do not have an owner's manual or current production safety signs, contact the manufacturer or your dealer immediately.

Mower caddies are designed for one-man operation. Never operate the caddy with anyone near, or in contact with, any part of the implement or PTO driveline. Be sure no one else, including bystanders, is near you when you operate this product.

Following these simple, basic safety rules, as well as others identified in the owner's manual and in product safety signs, will help minimize the possibility of accidents and increase your productivity in using this product. Be careful and make sure that everyone who operates the caddy knows and understands that it is a very powerful piece of machinery, and if used improperly, serious injury or death may result. The final responsibility for safety rests with the operator of this machine.

2 Introduction

TO THE DEALER:

Assembly and proper installation of this product is the responsibility of the Frontier dealer. Read manual instructions and safety rules. Make sure all items on the Preparation Check List in the Operator's Manual are completed before releasing equipment to the owner.

The dealer must complete the Product Registration form, located on the Frontier web site. Failure to complete and return the form does not diminish customer's warranty rights.

TO THE OWNER:

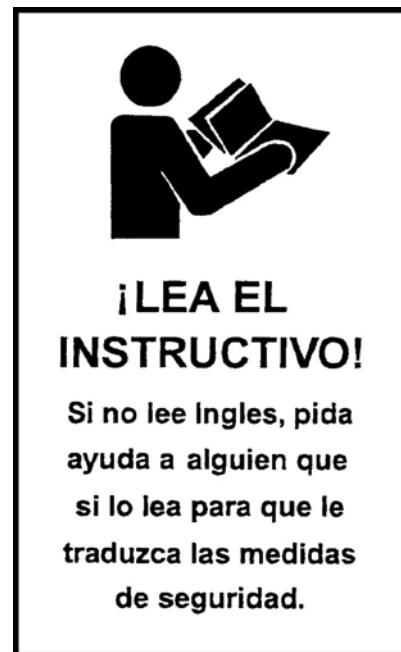
Read this manual before operating your Frontier equipment. Keep this manual handy for ready reference. Require all operators to read this manual carefully and become acquainted with all adjustments and operating procedures before attempting to operate the equipment. Replacement manuals can be obtained from your selling dealer.

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Please observe all safety information in this manual and safety decals on the equipment.

For service, your authorized Frontier dealer has trained mechanics, genuine Frontier service parts, and the necessary tools and equipment to handle all of your service needs.

Use only genuine Frontier service parts.

Throughout this manual, the term **IMPORTANT** is used to indicate that failure to observe procedures can cause damage to equipment. The terms **CAUTION**, **WARNING** and **DANGER** are used in conjunction with the Safety-Alert Symbol, (a triangle with an exclamation mark), to indicate the degree of hazard for items of personal safety.



This Safety-Alert Symbol indicates a hazard and means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

 **DANGER**

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

 **WARNING**

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed.

 **CAUTION**

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

IMPORTANT

Indicates that failure to observe can cause damage to equipment.

NOTE

Indicates helpful information.

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All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

General Information

The purpose of this manual is to assist you in operating and maintaining your disc/mower caddy for years of service. Read it carefully. The information and instructions in this manual have been compiled from extensive field experience and engineering data. Some information may be general in nature due to unknown and varying operating conditions. However, through experience and these instructions, you should be able to develop procedures suitable to your particular situation.

The illustrations and data used in this manual were current at the time of printing, but due to possible inline production changes, your machine may vary slightly in detail. We reserve the right to redesign and change the machines as may be necessary without notification.



WARNING: Some illustrations in this manual may show the disc/mower caddy with safety shields removed to provide a better view. The disc/mower caddy should never be operated with any safety shielding removed.

Throughout this manual, references are made to right and left direction. These are determined by standing behind the equipment facing the direction of forward travel.



SAFETY RULES

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgment, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

It has been said "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

• Training

Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals and safety decals are available from your dealer.) Failure to follow instructions or safety rules can result in serious injury or death.

If you do not understand any part of this manual and need assistance, see your dealer.

Know your controls and how to stop engine and attachment quickly in an emergency.

Operators must be instructed in and be capable of the safe operation of the equipment, its attachments, and all controls. Do not allow anyone to operate this equipment without proper instructions.

Never allow children or untrained persons to operate equipment.

• Preparation

Check that all hardware is properly installed and tightened.

Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

Make sure attachment is properly secured, adjusted, and in good operating condition.

Make sure collar slides freely and is seated firmly in tractor PTO spline groove.

Before putting equipment into service, check and adjust driveline length. Driveline must not bottom out or pull apart throughout the full range of the tractor hitch. Do not operate until driveline length is correct.

Make sure driveline shield safety chain is attached as shown in this manual. Replace if damaged or broken. Check that driveline guards rotate freely on driveline before putting equipment into service.

Before starting power unit, check all equipment driveline guards for damage. Replace any damaged guards. Make sure all guards rotate freely on all drivelines. If guards do not rotate freely on drivelines, repair and replace bearings before putting equipment into service.

Remove accumulated debris from this equipment, power unit, and engine to avoid fire hazard.

Power unit must be equipped with cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed.

A minimum 20% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with a loader, front wheel weights, ballast in tires or front tractor weights. Weigh the tractor and equipment. Do not estimate.

(Safety Rules continued on next page)



SAFETY RULES

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



(Safety Rules continued from previous page)

Make sure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)

Make sure shields and guards are properly installed and in good condition. Replace if damaged.

Inspect and clear area of stones, branches, or other hard objects that might be thrown, causing injury or damage.

• Transportation

Power unit must be equipped with cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed.

A minimum 20% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with a loader, front wheel weights, ballast in tires or front tractor weights. Weigh the tractor and equipment. Do not estimate.

Always comply with all state and local lighting and marking requirements.

Never allow riders on power unit or attachment.

Do not operate PTO during transport.

Watch for hidden hazards on the terrain.

Do not operate or transport on steep slopes.

Do not operate or transport equipment while under the influence of alcohol or drugs.

• Disc Mower Caddy Compatibility

The combined weight of disc mower and caddy should not exceed 1.5 X weight of the tractor.

Base Disc Mower Caddy weight = 1750 Lbs.

Fully Ballasted Disc Mower weight = 2190 Lbs.

Maximum recommended Disc Mower weight to use with caddy = 1421 Lbs.

Cab tractor is required when using Frontier Disc Mower Caddy.

Do not leave cutter bar in up position when parked.

Do not transport fully weighted caddy without a disc mower installed.

Maximum Compatible Disc Mower Cutting Width = 10' 2".

• Operation

Do not allow bystanders in the area when operating, attaching, removing, assembling, or servicing equipment.

Never direct discharge toward people, animals, or property.

Do not operate or transport equipment while under the influence of alcohol or drugs.

Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.

Operate only in daylight or good artificial light. Always comply with all state and local lighting and marking requirements.

Never allow riders on power unit or attachment.

Power unit must be equipped with cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed.



SAFETY RULES

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Always sit in power unit seat when operating controls or starting engine. Securely fasten seat belt, place transmission in neutral, engage brake, and ensure all other controls are disengaged before starting power unit engine.

Operate tractor PTO at 540 RPM. Do not exceed.

Do not operate PTO during transport.

Look down and to the rear and make sure area is clear before operating in reverse.

Do not operate or transport on steep slopes.

Do not stop, start, or change directions suddenly on slopes.

Use extreme care and reduce ground speed on slopes and rough terrain.

Watch for hidden hazards on the terrain during operation. Stop power unit and equipment immediately upon striking an obstruction. Turn off engine, remove key, inspect, and repair any damage before resuming operation.

Leak down or failure of mechanical or hydraulic system can cause equipment to drop.

• Maintenance

Before dismounting power unit or performing any service or maintenance, follow these steps: disengage power to equipment, lower the 3-point hitch and all raised components to the ground, set parking brake, stop engine, remove key, and unfasten seat belt.

Before performing any service or maintenance, disconnect driveline from tractor PTO.

Do not modify or alter or permit anyone else to modify or alter the equipment or any of its components in any way.

Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.

Make sure attachment is properly secured, adjusted, and in good operating condition.

Keep all persons away from operator control area while performing adjustments, service, or maintenance.

Never go underneath equipment (lowered to the ground or raised) unless it is properly blocked and secured. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death. Follow Operator's Manual instructions for working underneath and blocking requirements or have work done by a qualified dealer.

Make certain all movement of equipment components has stopped before approaching for service.

Tighten all bolts, nuts, and screws to torque chart specifications. Check that all cotter pins are installed securely to ensure equipment is in a safe condition before putting unit into service.

Make sure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)

Make sure shields and guards are properly installed and in good condition. Replace if damaged.

• Storage

Block equipment securely for storage.

Keep children and bystanders away from storage area.

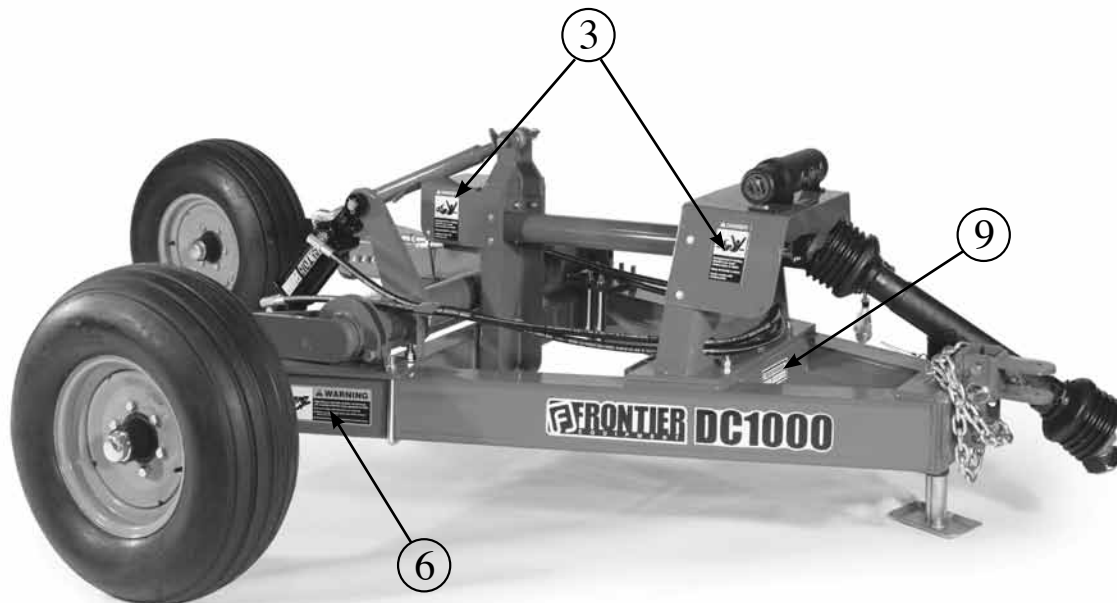
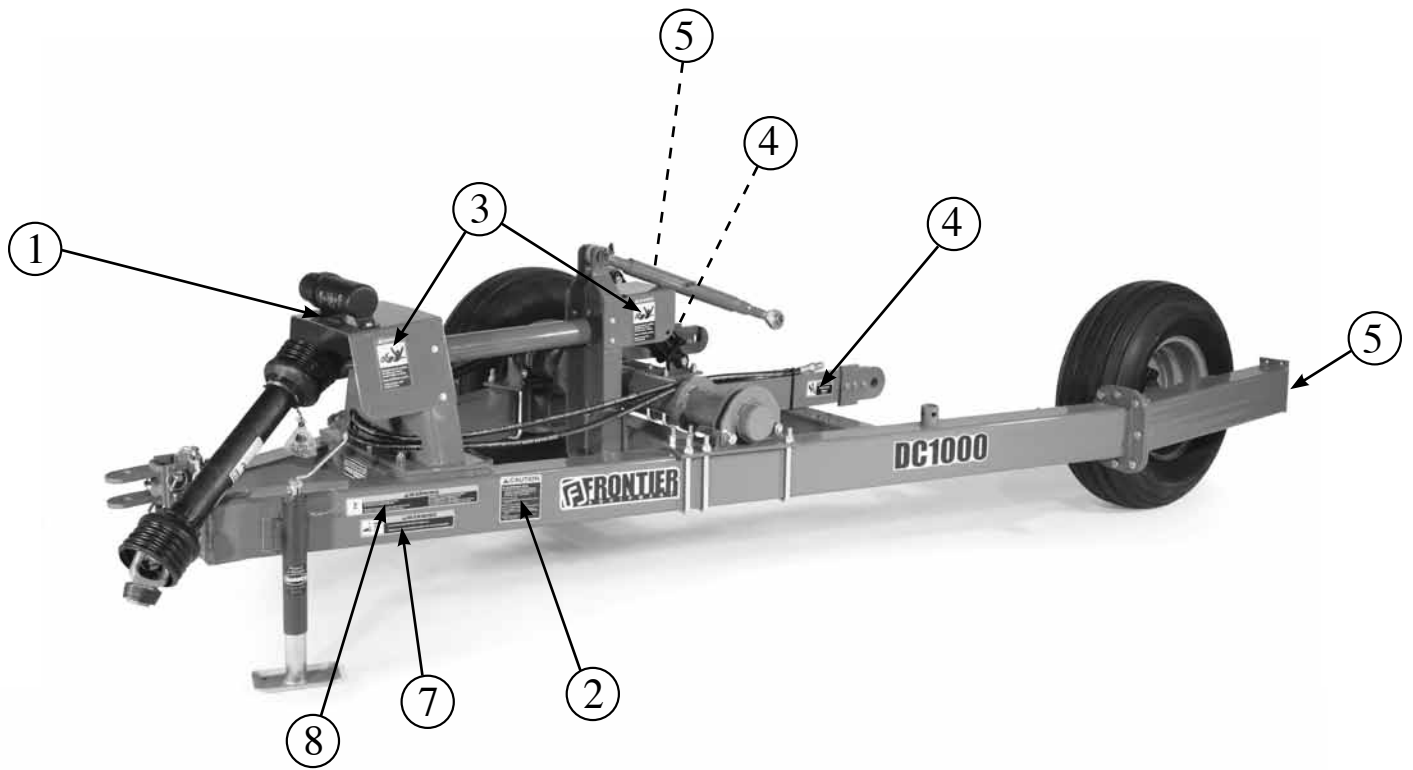
Follow manual instructions for storage.

Always use a tractor to position equipment for storage. Never attempt to move equipment by hand.

SAFETY and INSTRUCTIONAL DECALS

⚠ ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! ⚠

Replace Immediately if Damaged!



SAFETY and INSTRUCTIONAL DECALS

⚠ ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! ⚠

Replace Immediately if Damaged!



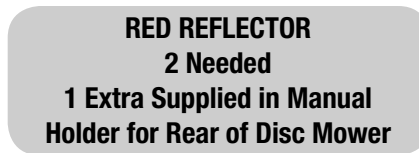
① 540 RPM



④ PINCH POINT



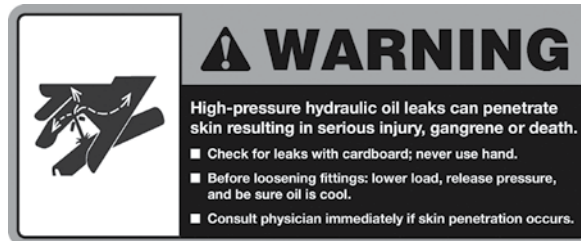
② CAUTION INJURY



⑤ RED REFLECTOR
TIFC711207



⑨ SERIAL NUMBER



⑥ HIGH PRESSURE HYDRAULICS



③ ENTANGLEMENT



⑦ HITCH WARNING



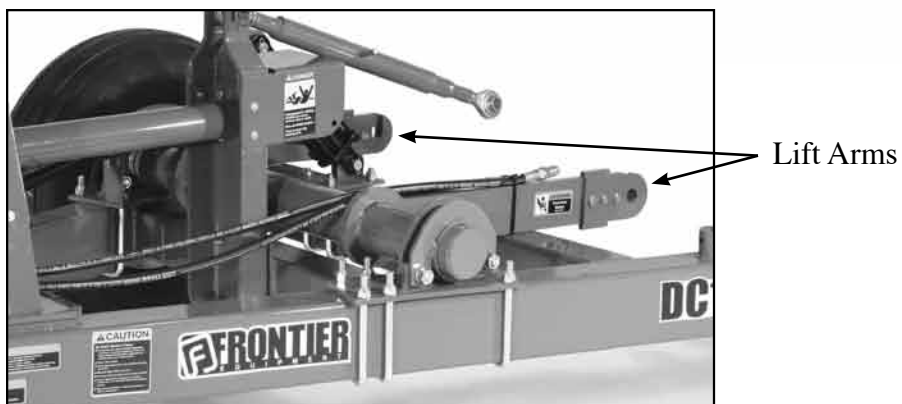
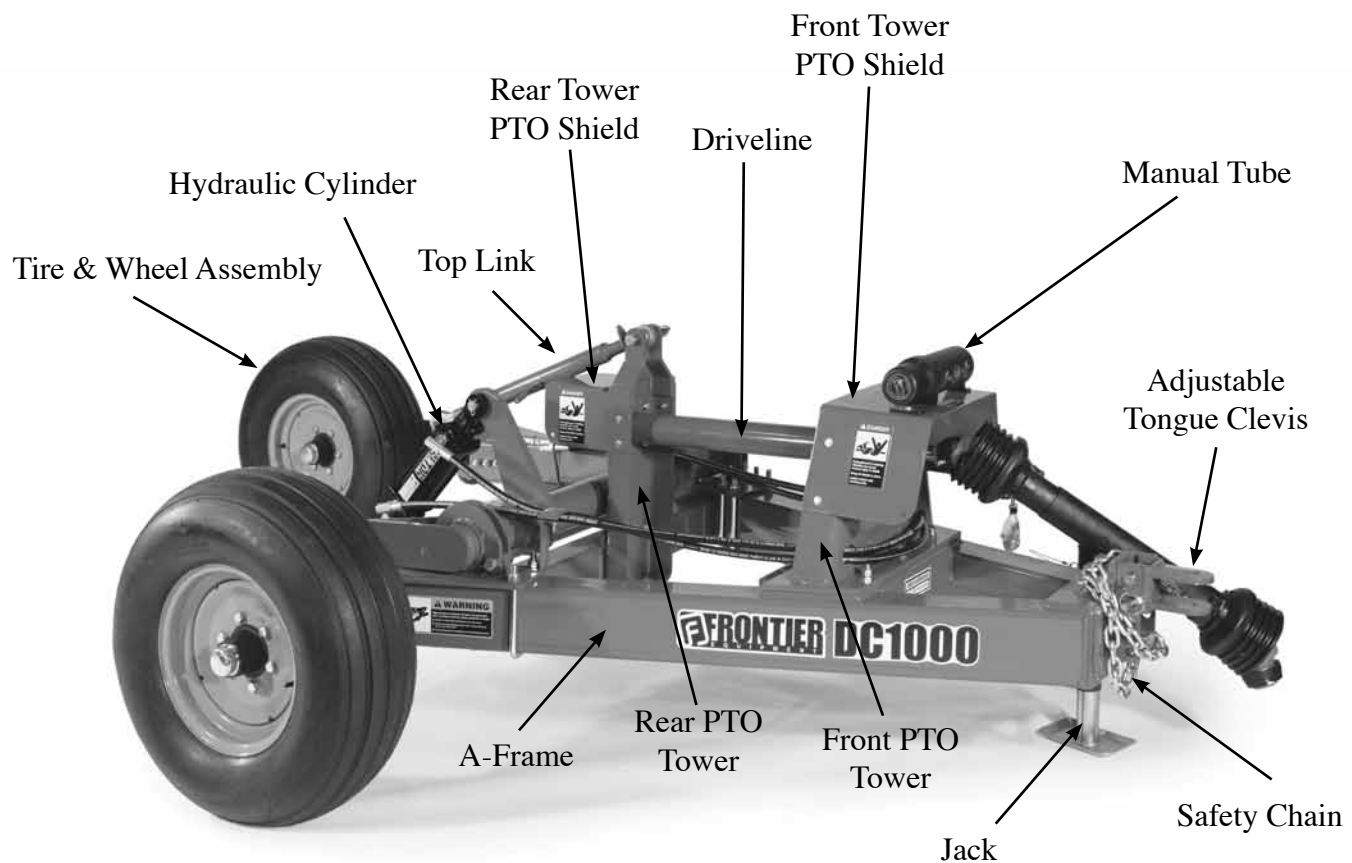
⑧ TRANSPORT SPEED

Warning Label Sheet
Part Number 5TIDC611124
(Contains Label #s 1, 2, 3, 4, 6, 7 & 8)

GENERAL DESCRIPTION

Your Frontier DC1000 Disc/Mower Caddy has been carefully designed for easily moving your disc mower. This manual is provided to give you the necessary operation and maintenance instructions for keeping your caddy in excellent operating condition. Please read this manual thoroughly. Understand the purpose of the controls and how to use them. Observe all safety precautions on the machine and as noted throughout this manual. If any assistance or additional information is needed, contact your authorized Frontier dealer.


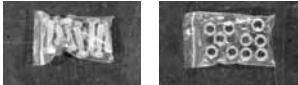






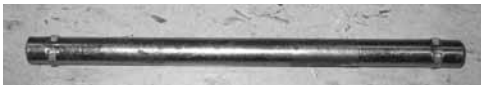
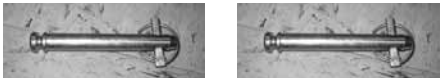


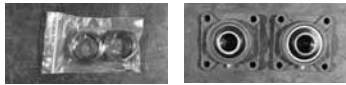



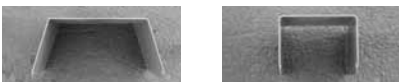

Major components



TECHNICAL DESCRIPTION

Model	DC1000
Frame	
Construction	4" x 6" tubing
Ballasting	
Internal	Internally weighted and counterbalanced
External	Up to 5 tongue and 5 side weights as needed
Hitch	
Type	Adjustable Clevis Tongue
Operating Dimensions	
Overall Length, in. (mm)	140 (3556)
Overall Width, in. (mm)	83 (2108.2)
Overall Height, in. (mm)	44 (1117.6)
Approx. Weight, lb. (kg) without suitcase weights	1750 (795.5)
Approx. Weight, lb. (kg) with suitcase weights	2190 (995.5)
Hydraulic Lift 3-point hitch	
Category	2
Cylinder Stroke	6"
Hoses	All hydraulic hoses (3) and tips included
Tires	
Size	11L x 15SL ribbed implement tires
PTO	
Type	Equal angle Cat IV 540rpm (20 spline double locking collar)
Jack	
Type	Screw Type
Shipping Dimensions	
Overall Length, in. (mm)	85.75 (2178.05)
Overall Width, in. (mm)	90 (2286)
Overall Height, in. (mm)	21 (533.4)
Approx. Weight, lb. (kg) without suitcase weights	1975 (897.7)

HARDWARE CHECK SHEET

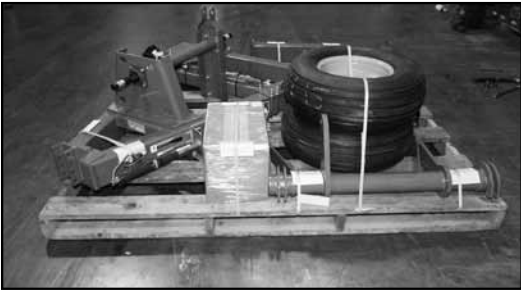
Ref #	Qty.	Part #	Description	Picture
1	1	5TIDC611154	44" Double Splined Shaft	
2	10	5TIDC611112	PTO HOUSING BOLTS 5/8" x 2" Grade 5 hex bolt with nylon lock nut	
3	1	5TIDC611101	Manual Holder with Hardware (1/46" x 1" Grade 5 hex bolt with hardware), Manual and red reflector inside	
4	1	5TIDC611132	Clevis Tongue	
5	1	5TIDC611108	Cat 2 Pin with Lynch Pin	
6	8	5TIDC611122	FLANGE BOLTS 5/8" x 2" Grade 5 with nylon lock nut	
7	4	5TIDC611113	CROSSBAR BOLTS 3/4" x 2 1/2" Grade 2 with lock washer and nut	
8	8	5TIDC611115	PTO SHIELD BOLTS 1/4" x 1" Grade 5 with flat washer, lock washer and hex nut	
9	1	5TIDC611146	Top Link Adjustment Handle (Included for replacement with Top Link Only)	
10	2	5TIDC611109	Cat 1 Pins with Lynch Pins	
11	1	5TIDC611136	Safety Chain with 1/2" x 2" Grade 2 with two washers and nylon lock nut	
12	1	5TIDC611103	Hydraulic Cylinder	
13	2	5TIDC611102	Eccentric Locking Collars w/ Bearings	
14	1	5TIDC611118	Hydraulic Cylinder Safety Stop with Locking Pin	
15	2	5TIDC611120	Hydraulic Hoses with 90° Connecting Tips	
16	1	5TIDC611137	Hydraulic Hose with Straight Connector	
17	2	5TIDC611148 & 5TIDC611149	Front & Rear PTO Shields	
18	1	5TIDC611114	Hose Clamp with 3/8" x 2" Grade 2 Hex Bolt and flanged nylon lock nut	

ASSEMBLY & SET UP

TOOLS REQUIRED: rubber hammer, impact wrench, 1 1/8" socket & wrench, adj. wrench, 3/4" socket & wrench, regular hammer, 1/2" socket, socket wrench, 15/16" socket, 9/16" socket, allen wrenches, 7/8" socket, grease gun, and Teflon tape or pipe compound.

Note: Ref # refers to the DC1000 Hardware Check Sheet included at the end of this manual (pg. 12) and in the hardware box that ships with caddy.

• Removing caddy from pallet



1. Place pallet in open area to begin assembly.



2. Remove box of hardware and set aside.



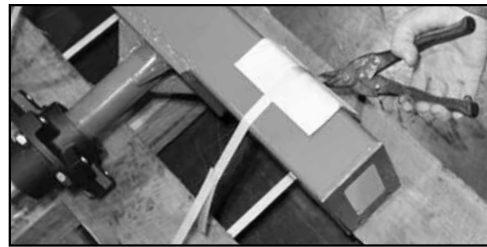
3. Remove tires and wheels from pallet and set in assembly area.



4. Cut weight retaining strap on end of the main A-frame.



5. Cut weight retaining strap on end of frame and rear wheel assembly.



6. Remove bands from frame and rear wheel assembly.



7. Using forklift, move frame and rear wheel assembly and line up bolt holes with main frame. Make sure wheel is to the inside. Use caution as assembly is extremely heavy.



8. Using 15/16" socket, install eight 5/8" x 2" bolts and nylon locknuts into frame and tighten. (Ref #6)

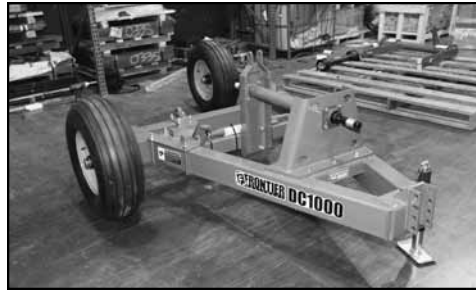
(continued on next page)

ASSEMBLY & SET UP

(continued from previous page)

9. Using forklift, remove large A-frame from pallet and place in assembly area.

CAUTION: A-frame is extremely heavy and has significantly unbalanced weight. Use Extreme Caution!



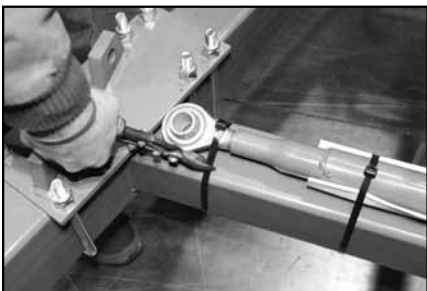
10. Remove all lugs from both hubs.



11. Install wheels and tires on both hubs.



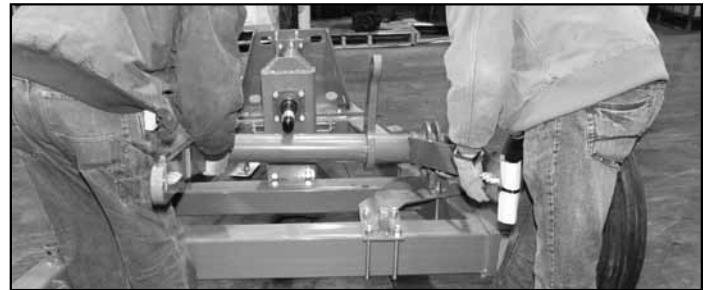
12. Once tires and wheels are in place, place chocks in front and behind each wheel. Using forklift or front end loader, lift front of caddy and swing front jack into down position and lower A-frame onto jack.



12. Cut zip-tyes to remove top link from A-Frame of caddy

13. Your A-frame is now ready to have components added to the frame.

• Crossbar Lift Arm Assembly



14. Using two people to lift the crossbar assembly, place onto A-frame. Make sure that lift arms face rear of caddy.



15. Install four 3/4" x 2 1/2" Grade 2 bolts with lock washers and nuts from hardware box (Ref #7) and tighten. Install all four bolts with nuts facing toward outside of caddy.

Note: When installing the bolt in the right rear side, with assistance, lift the arm to access the hole and install the head of the bolt on the inside.

(continued on next page)

ASSEMBLY & SET UP

• Installing PTO Shaft Shields and Manual Holder



Note: There are two PTO shaft shields to install. (Ref #17)

16. Install the smaller PTO guard on the rear bearing tower and the larger on the front bearing tower using four (4) 1/4" x 1" hex bolts, eight (8) 1/4" flat washers, four (4) 1/4" lock washers, and four (4) 1/4" hex nuts from hardware box. (Ref #8) Use a 7/16" wrench to secure all nuts and bolts.



17. Install manual holder on front PTO shield using 1/4" x 1" bolts and nuts. (Ref #3)

Note: Manual Holder contains manual and a red reflector for installation on the rear of disc mower, IF the mower obscures the view of the red reflector on the back, right-hand side of the caddy cart. Install this red reflector on the back of the disc mower as close to the right-hand outermost portion as practical.

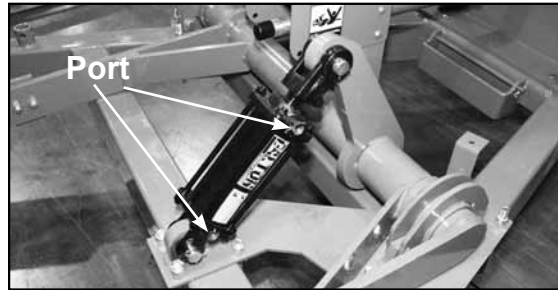
• Installing Hydraulic Cylinder Assembly



18. Remove pin clips from hydraulic cylinder pins and remove pins on both ends of cylinder. (Ref #12)



19. Install hydraulic cylinder to frame and crossbar lift assembly.

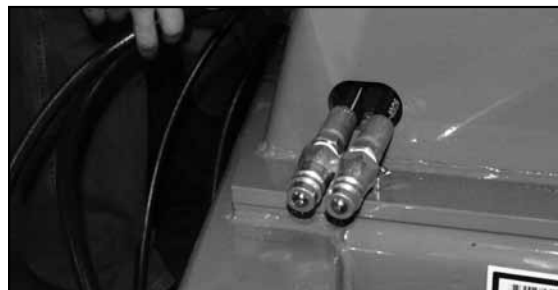


Note: Be sure that hose hookup ports on hydraulic cylinder face outside of caddy.



20. Install two hydraulic hoses with elbows to the hydraulic cylinder. Be sure to use Teflon tape or pipe compound on these fittings. (Ref #15)

Note: The third hydraulic hose with straight connector in the hardware box is extension hose that will be used later on the disc mower cylinder. (Ref #16)



21. Thread hydraulic lines through hole in base of front bearing mount tower.

(continued on next page)

ASSEMBLY & SET UP

(continued from previous page)



22. Place hydraulic lines into hydraulic hose clamp and tighten.



27. Install safety chain on tongue in bottom hole of hitch. If tractor hitch height requires hitch to be in bottom hole, attach safety chain to top hole. (Ref #11)



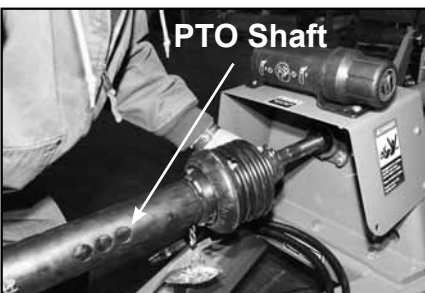
23. Using Category 2 pin, install top link adjustment arm on top of rear bearing mount tower. (Ref #5)



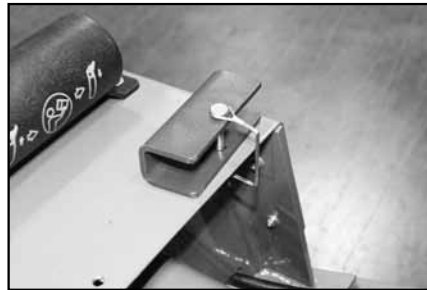
24. Install top link adjustment handle (Ref #9) into shaft body on top link. Line the handle up directly over hole in top link. Use hammer to drive handle through top link.



25. Using two pins and clevis tongue, install tongue assembly on front of A-frame. (Ref #4 & Ref #10)



26. Install PTO shaft on front bearing mount tower.



28. Remove red Hydraulic Cylinder Safety Stop with Locking Pin and install through hole on rear of PTO shield. (Ref #14)



29. Your caddy is now ready for your disc mower.

ATTACHING

• Attaching Caddy to Tractor

⚠ CAUTION: To avoid bodily injury or machine damage whenever an implement is attached, put transmission in **PARK** position and check the full range of hitch for interference, binding, or PTO separation. Do not stand between tractor and implement.

1. Ensure that disc mower caddy is on level surface with wheels firmly blocked.



2. Back tractor up slowly until hitch is near caddy tongue.



3. Use caddy jack to adjust caddy tongue to correct height.



4. Slowly back tractor hitch onto tongue and align holes. Insert pin into hitch and secure with R-pin in bottom of hitch pin.



5. Attach safety chain to tractor.



6. Slowly lower jack to let weight of caddy down onto tractor.



7. Remove jack completely and store on rear of caddy near rear tire.



8. Attach two hydraulic cylinder hoses on caddy to rear of tractor.

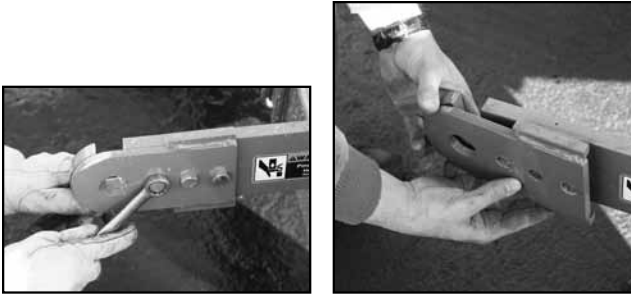
9. Your caddy is now ready to have a disc mower attached.

ATTACHING

• Attaching Disc Mower to Caddy

1. Ensure that mower is on level surface and stabilized.

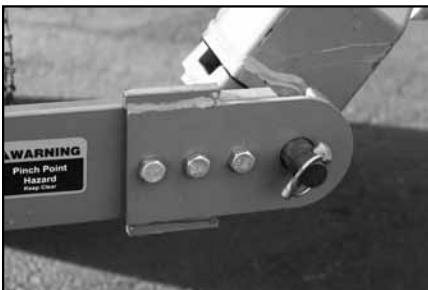
Note: Inside measurements of caddy lift arm are 32 3/4". If necessary, adjust hitch pins on disc mower to accommodate caddy arm width.



2. Remove mounting brackets from caddy lift arms.



3. Position caddy arms under mower hitch pins so that they are just below mower hitch pins.
4. Using hydraulic controls on tractor, slowly raise the lift arms on caddy to "seat" mower hitch pins in caddy arms.



5. Reinstall mounting brackets and bolts, tighten bolts.
6. Install lynch pins in end of each hitch pin.



7. Install top link on caddy to top of disc mower.

Note: Top link may have to be adjusted with adjustment handle in order to fit.



8. Once adjusted, tighten lock ring on top link.



9. Install PTO shaft from the front of mower to the rear bearing mount tower.



10. Install PTO driveline safety chain to mower.



11. Remove quick coupler hydraulic nipple from end of mower disc cylinder line.

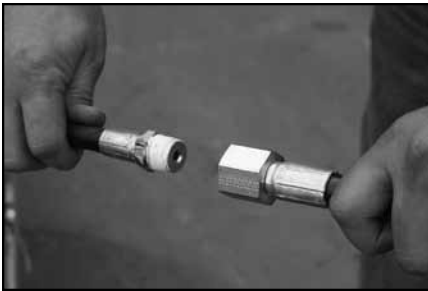
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ATTACHING

(continued from previous page)



12. Attach teflon tape or pipe compound to thread fittings on hydraulic line.



13. Attach 9' hydraulic line extension to end of mower hydraulic cylinder hose to increase overall length and tighten.



14. Reattach hydraulic nipple coupler to end of lengthened hydraulic line. Be sure to use teflon tape or pipe compound on all fittings.



15. Thread extended hydraulic line through opposite hole in base of PTO housing tower and attach to rear of tractor.

! WARNING: Cutter bar guard/cover must be folded back into transport position before attempting to raise mower blade.



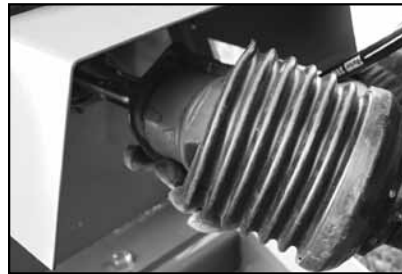
16. Start tractor and slowly raise caddy lift arms.

17. If mower is equipped with it's own stand, raise or release stand on mower at this time.

18. Slowly raise cutter bar to full upright position using hydraulic cylinder on mower.



19. Remove hydraulic cylinder safety stop and place stop in storage location.



20. Install PTO shaft from front PTO housing tower to rear of tractor.



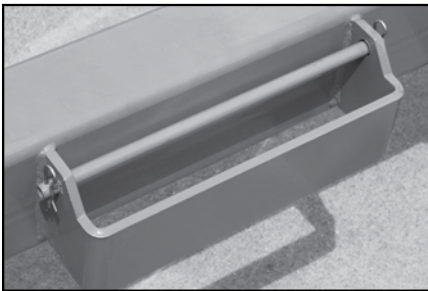
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ATTACHING

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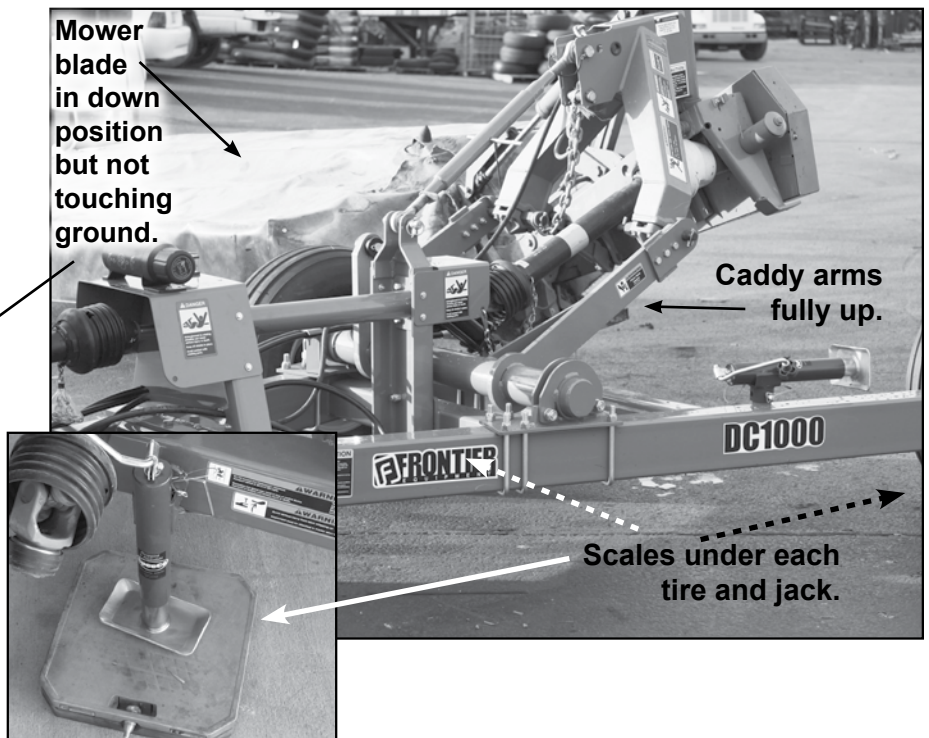
21. If equipped, install mower blade release handle and rope to tractor within easy and safe reach of operator.



22. If needed, install approved suitcase weights for ballast on front and rear weight racks of disc mower caddy to achieve proper weight balance.

IMPORTANT: Unit must be properly ballasted before operation. See “Ballasting” in next section before use.

• Ballasting Disc Mower Caddy



Note: Please contact your John Deere Dealer for assistance with ballasting your caddy cart. If you are able to ballast your caddy cart without assistance from your dealer, please follow the proceeding ballasting procedure:

To ensure safe operation of your mower, ballast your mower caddy to have positive tongue weight and a maximum side-to-side weight distribution ratio of 3.2. Side-to-side weight distribution ratio should be calculated by dividing the righthand caddy tire weight by the lefthand caddy tire weight (RH tire wt./LH tire wt.) when the mower is fully raised on the cart and with the cutter bar lowered to the side but not touching the ground.

Note: All references to RH/LH side of machine are made with the operator facing the operating direction of the machine.

Note: The R66949 John Deere suitcase weight is the approved suitcase weight to use when ballasting your Frontier Mower Caddy Cart.

OPERATION and DETACHING

• Disc Mower Operation

1. Before mowing, ensure that all mower guards and covers are in place and are in good condition. Replace if necessary. (Consult your mower's operating manual.)



2. Raise caddy arm to full upright position and remove hydraulic cylinder safety stop.



3. Slowly lower disc mower blade to fully down position.



4. Slowly lower caddy arms until cutter bar is in its working position.



5. Adjust top link on caddy to ensure that disc mower blade is at desired operating level.



6. Lower disc mower safety guard/cover.
7. Slowly engage tractor PTO. Let mower run to make sure all parts are working properly.



8. Put tractor in gear to mow at recommended speed for your tractor and terrain. (Consult your disc mower manual.)

• Detaching Caddy from Tractor (with mower attached)

1. Ensure that disc mower caddy is on level surface with wheels chocked. (Disc mower cutter bar should be in full upright position at this point.)



2. With tractor in park, raise disc mower caddy arms to full upright position.

(continued on next page)

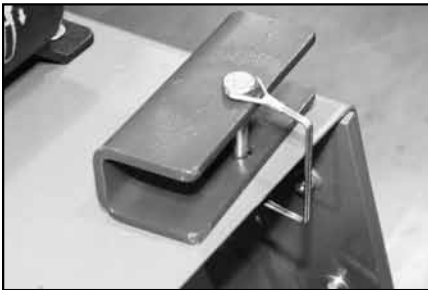
DETACHING

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3. Remove hydraulic cylinder safety stop from hydraulic cylinder.

Note: The safety stop should be loose on the cylinder arm with no pressure on the stop.



4. Place safety stop in storage location on PTO shield.



5. Slowly lower cutter bar of disc mower to side to be parallel with ground.



6. Then, slowly lower the disc mower caddy arms down until cutter bar rests on ground.

7. Turn tractor off.



8. Remove jack from rear position on frame and place on tongue of mower caddy. Raise jack until weight of caddy is resting on jack rather than tractor tongue.



9. Remove hydraulic lines from tractor.



10. Remove PTO shaft from tractor.

11. Remove rope for blade arm release if so equipped.



12. Remove pin from hitch.



13. Remove safety chain from tractor.

14. Slowly pull tractor away from caddy.

LUBRICATION and MAINTENANCE

• Lubrication Before Each Use

1. Driveline Universal Joints

- Apply multi-purpose grease with a grease gun.

2. Driveline Guard

- Apply 2-3 shots of multipurpose grease with grease gun to plastic fitting.

3. Driveline Profile

- Disconnect PTO Driveline.
- Pull the two sections about half way apart and rotate until the holes in the plastic guards align with the exposed spline in the shaft.
- Apply thin coat of multi-purpose grease to the spline section in several locations around the spline. Contract and expand the shaft several times to distribute the grease.
- Reconnect the PTO Driveline.

Note: Pull each driveline section to be sure driveline and shields are securely connected. Make certain PTO shielding is in good condition. Do not grease outer or inner plastic shields.

4. PTO Housing Bearings

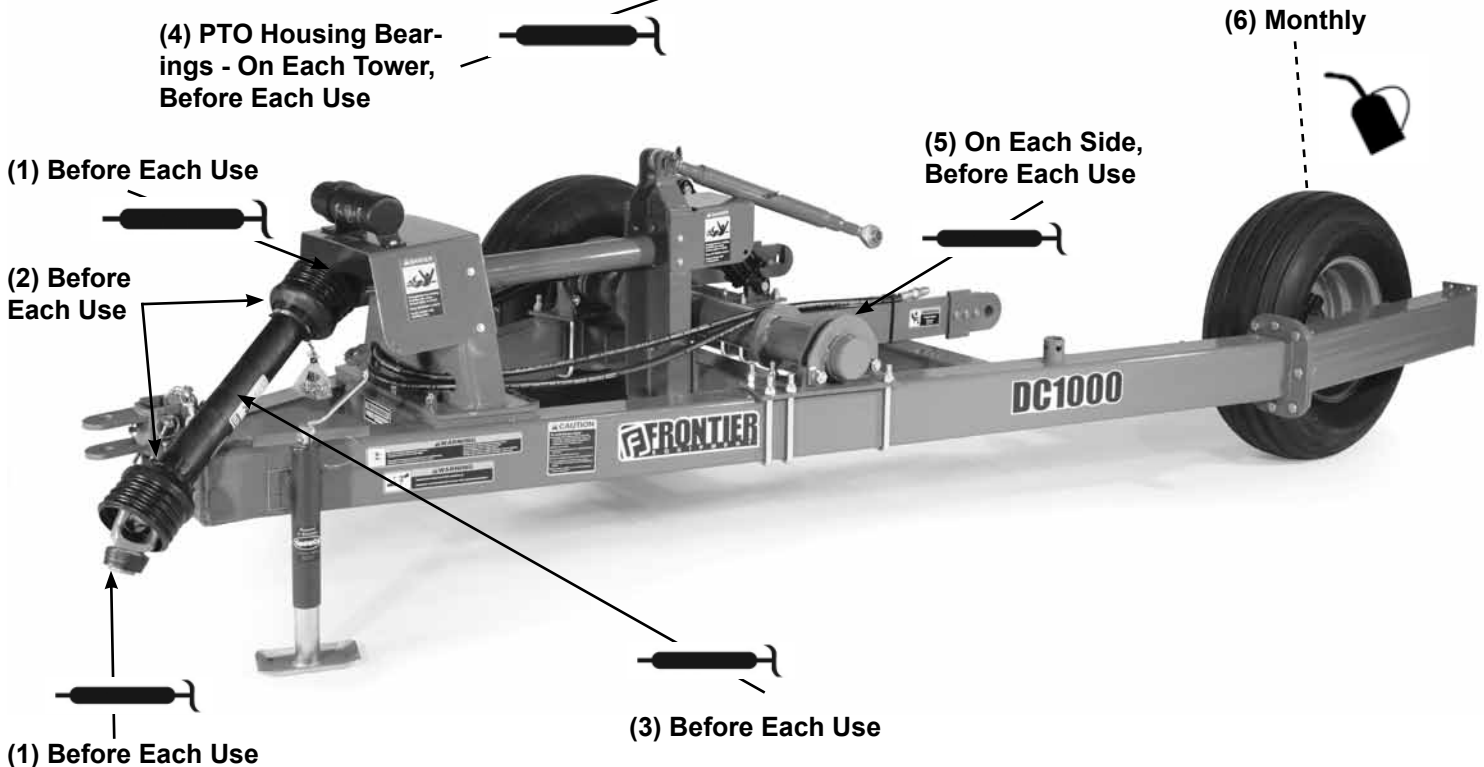
- Apply multi-purpose grease with a grease gun.

5. Crossbar Lift Arm Assembly

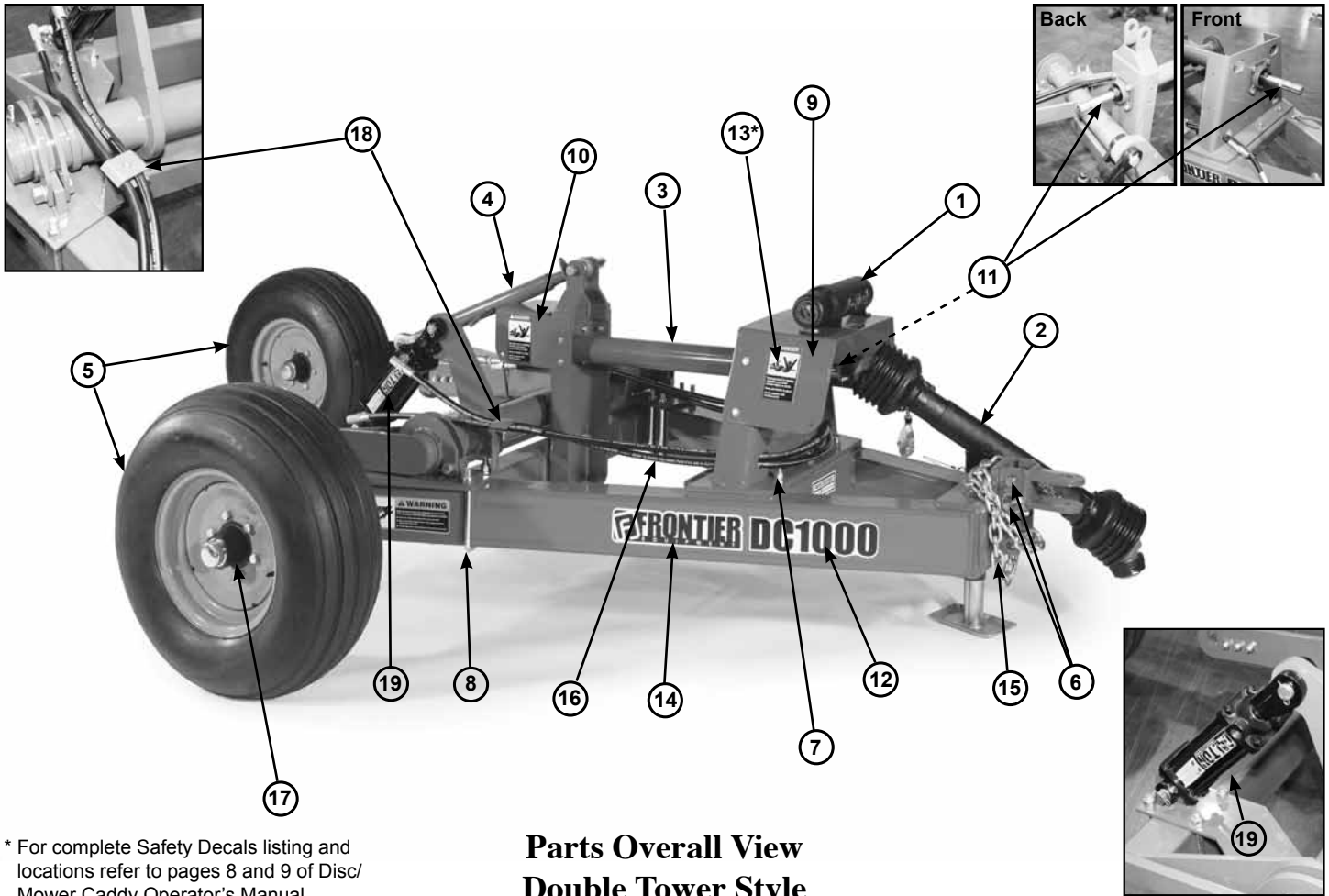
- Apply multi-purpose grease with a grease gun.

6. Wheel Bearings

- Check monthly and repack as necessary.



PARTS



* For complete Safety Decals listing and locations refer to pages 8 and 9 of Disc/Mower Caddy Operator's Manual.

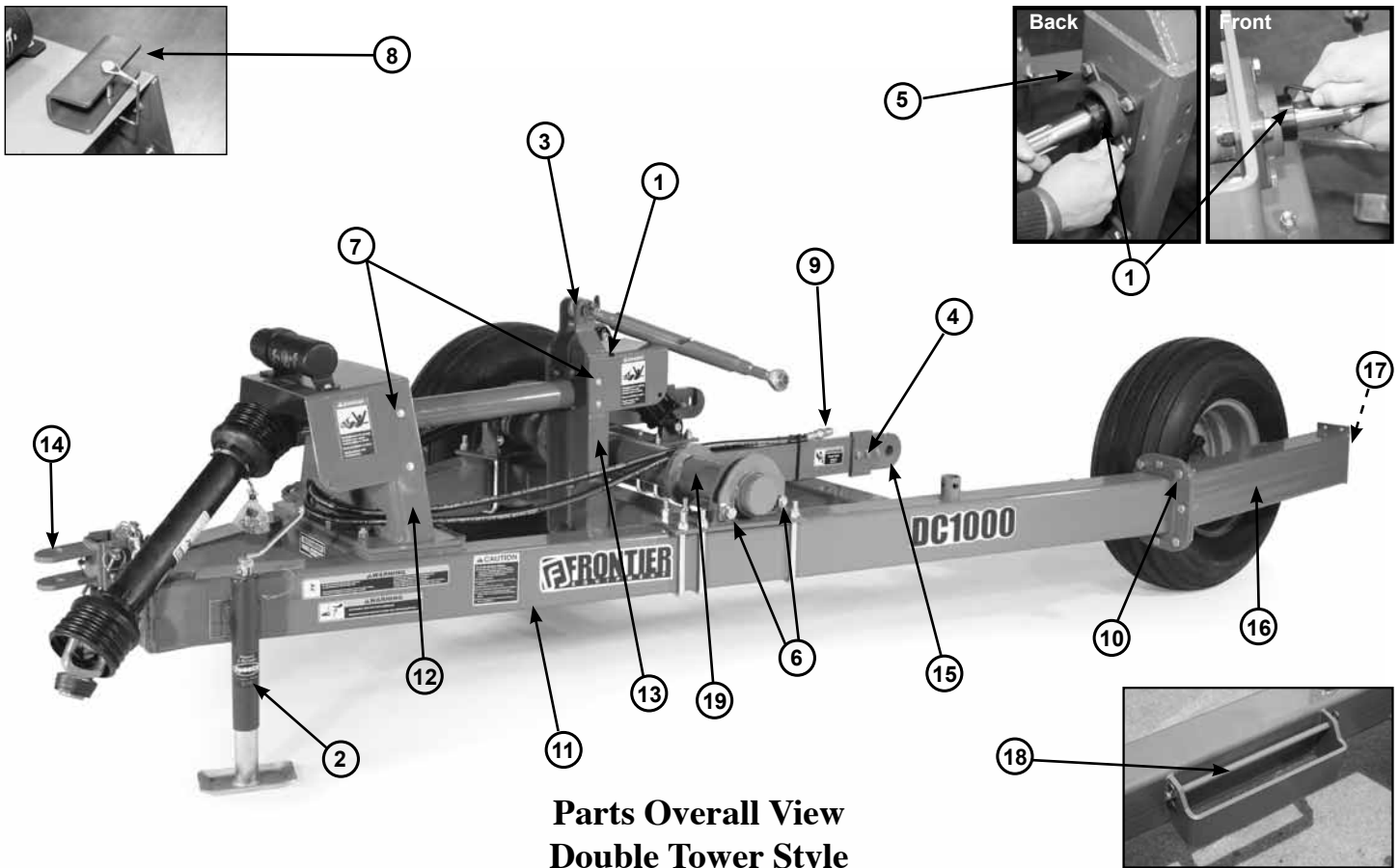
Parts Overall View Double Tower Style

Item Number	Qty.	Qty. Shipped	Part Number	Description
1	1	1	5TIDC611101	Black Manual Holder w/ Hardware
2	1	1	5TIDC611145	610MM 20 Spline PTO Shaft
3	1	1	5TIDC611151	PTO Tube Guard
4	1	1	5TIDC611146	29" Top Link
5	2	1	5TIDC611106	Wheel & Tire Combo
6	2	1	5TIDC611109	Cat #1 Hitch Pin w/ Lynch Pin
7	6	6	5TIDC611112	PTO Housing Mount Assembly Hardware
8	7	1	5TIDC611116	5/8" U-Bolts w/ Nylon Lock Nuts
9	2	1	5TIDC611148	Front PTO Shield Plate
10	1	1	5TIDC611149	Rear PTO Shield Plate
11	1	1	5TIDC611154	44" Double Spline Shaft
12	2	1	5TIDC611123	Model Number Decal Label
13	1	1	5TIDC611124	Warning Decal Sheet (see pages 8 & 9)*
14	2	1	TIFC711172	Frontier Logo Decal
15	1	1	5TIDC611136	Disc Caddy Safety Chain w/ Hook & Latch
16	2	1	5TIDC611120	9' Hydraulic Hoses w/ 90° Ends
17	2	1	5TIDC611139	Hub Kit (Hub, Lug Bolts, Dust Cap & Bearings)
18	1	1	5TIDC611114	Hydraulic Line Holder w/ Hardware Kit
19	1	1	5TIDC611103	Hydraulic Cylinder

Use this parts list if serial number is XFDC10X001400 or greater.

24 Parts

PARTS

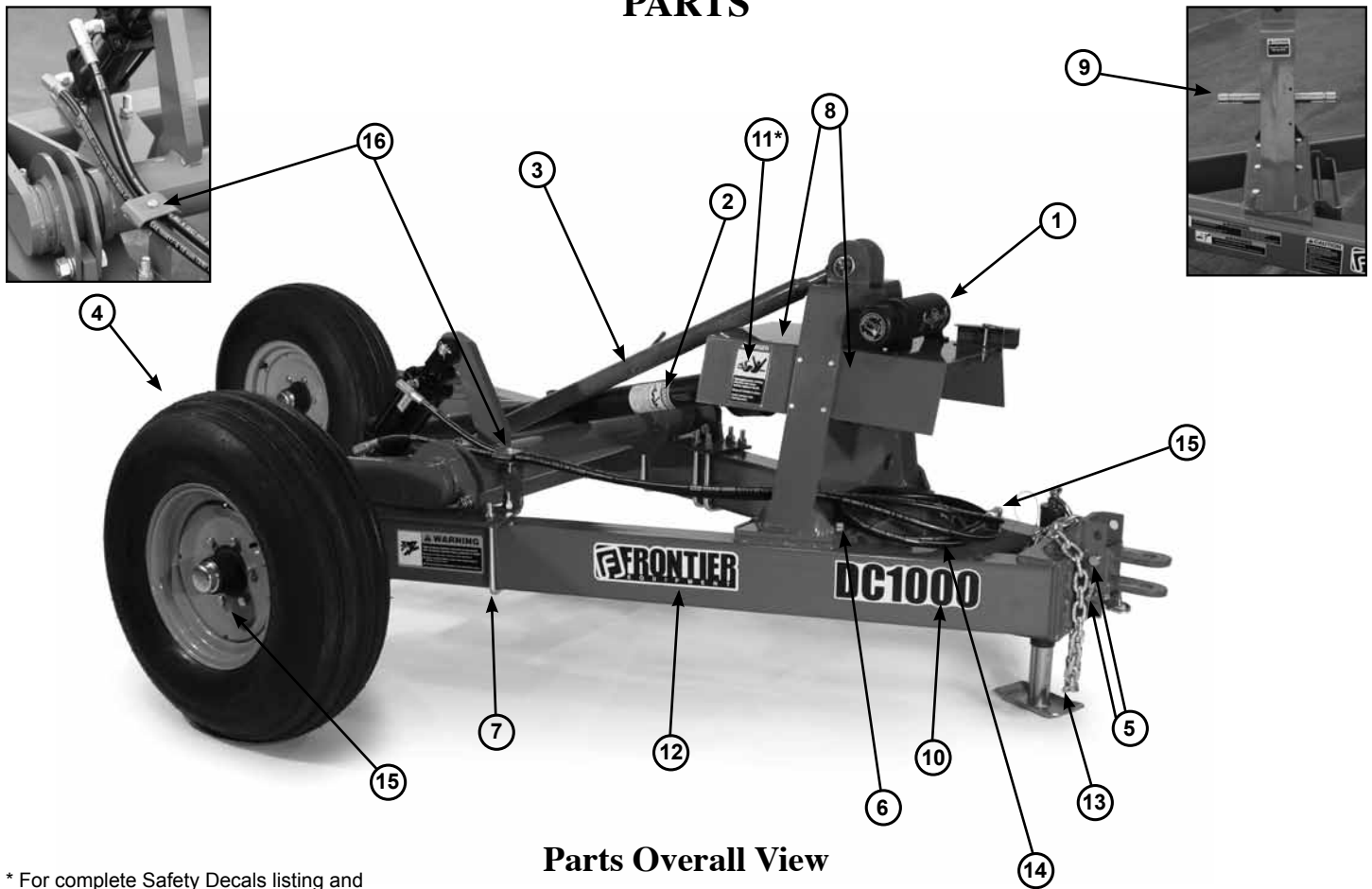


**Parts Overall View
Double Tower Style**

Item Number	Qty.	Qty. Shipped	Part Number	Description
1	2	1	5TIDC611102	Eccentric Locking Collar Bearings (hardware not included)
2	1	1	5TIDC611107	Jack
3	1	1	5TIDC611108	Cat #2 Top Link Pin w/ Lynch Pin
4	4	2	5TIDC611110	Hitch Tab Hardware
5	4	4	5TIDC611150	Bearing Hardware
6	4	2	5TIDC611113	Disc Caddy Hitch Adjustment Beam Hardware
7	8	4	5TIDC611115	PTO Shield Hardware
8	1	1	5TIDC611118	Hydraulic Cylinder Safety Stop w/ Clinch Pin
9	2	1	5TIDC611138	Disc Caddy Hydraulic Hose End Attachment
10	8	8	5TIDC611122	Frame Plate Hardware
11	1	1	5TIDC611147	Disc Caddy Frame
12	1	1	5TIDC611152	Front Bearing Mount Tower
13	1	1	5TIDC611153	Rear Bearing Mount Tower
14	1	1	5TIDC611132	Disc Caddy Hitch Clevis Tongue
15	2	1	5TIDC611134	Disc Caddy Hitch Tab
16	1	1	5TIDC611135	Rear Frame and Axle Attachment (Frame & Spindle Only)
17	3	1	TIFC711207	Red Reflector Decal
18	2	1	5TIDC611119	Weight Retaining Bar w/ R-Pin
19	1	1	5TIDC611133	Disc Caddy Hitch Adjustment Beam
20	2	1	5TIDC611137	(Not Shown) Disc Caddy Hydraulic Extension Hose w/ Straight End

Use this parts list if serial number is XFDC10X001400 or greater.

PARTS



* For complete Safety Decals listing and locations refer to pages 8 and 9.

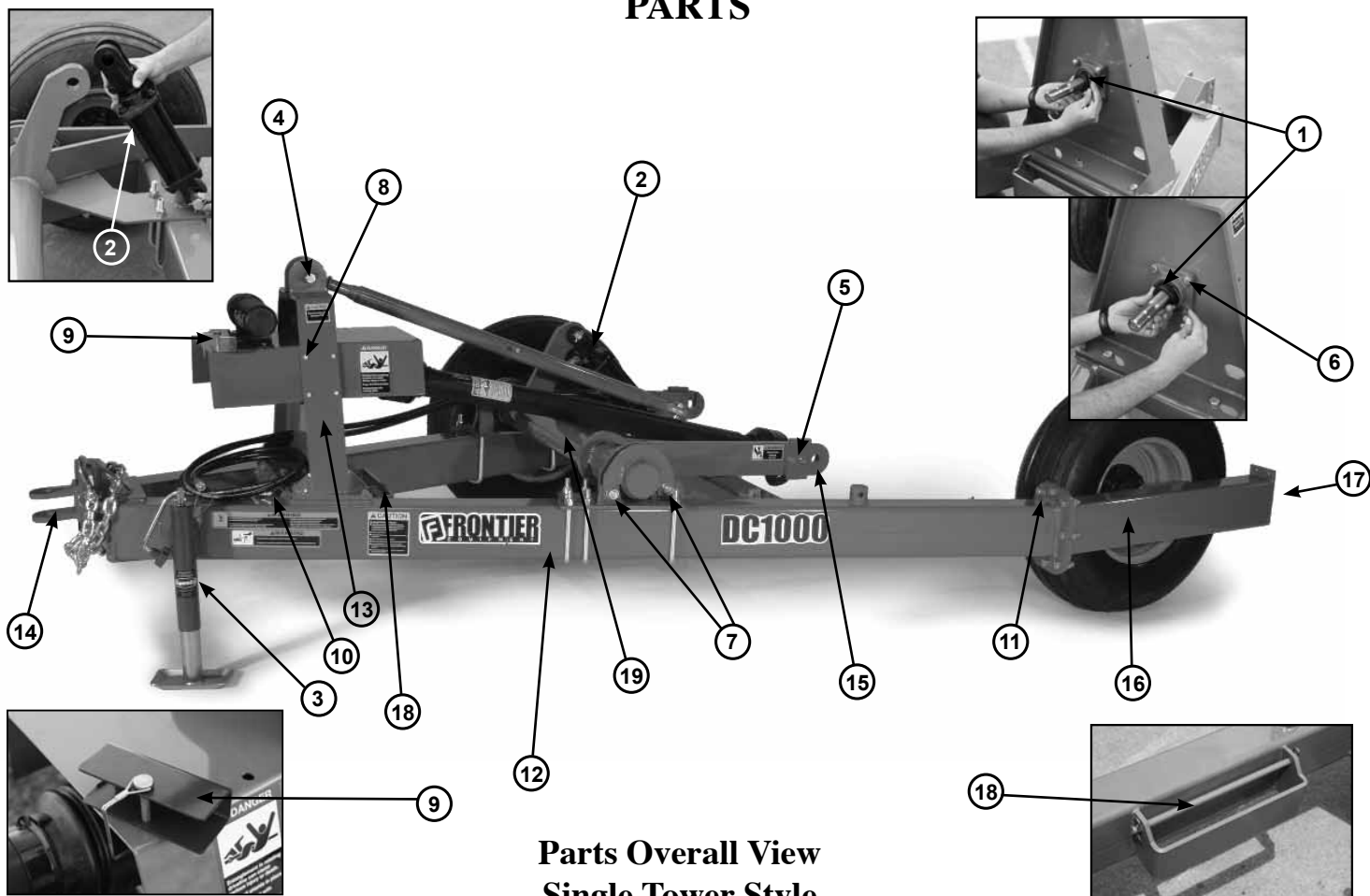
Parts Overall View Single Tower Style

Item Number	Qty.	Qty. Shipped	Part Number	Description
1	1	1	5TIDC611101	Black Manual Holder w/ Hardware
2	1	1	5TIDC611104	60" PTO Shaft
3	1	1	5TIDC611105	50" Top Link
4	2	1	5TIDC611106	Wheel & Tire Combo
5	2	1	5TIDC611109	Cat #1 Hitch Pin w/ Lynch Pin
6	6	6	5TIDC611112	PTO Housing Mount Assembly Hardware
7	7	1	5TIDC611116	5/8" U-Bolts w/ Nylon Lock Nuts
8	2	1	5TIDC611117	PTO Shield Plate (Rev A)
8	2	1	5TIDC611142	Single Tower PTO Shield Plate (Rev B) (For DC1000 with serial number XFDC10X001234 or after)
9	1	1	5TIDC611121	15" Six-Spine PTO Adapter Shaft
10	2	1	5TIDC611123	Model Number Decal Label
11	1	1	5TIDC611124	Warning Decal Sheet (see pages 8 & 9)*
12	2	1	TIFC711172	Frontier Logo Decal
13	1	1	5TIDC611136	Disc Caddy Safety Chain w/ Hook & Latch
14	1	1	5TIDC611120	9' Hydraulic Hoses w/ 90° Ends
15	2	1	5TIDC611139	Hub Kit (Hub, Lug Bolts, Dust Cap & Bearings)
16	1	1	5TIDC611114	Hydraulic Line Holder w/ Hardware Kit
17	2	1	5TIDC611137	(Not Shown) Disc Caddy Hydraulic Extension Hose w/ Straight End

Use this parts list if serial number is before XFDC10X001400.

26 Parts

PARTS

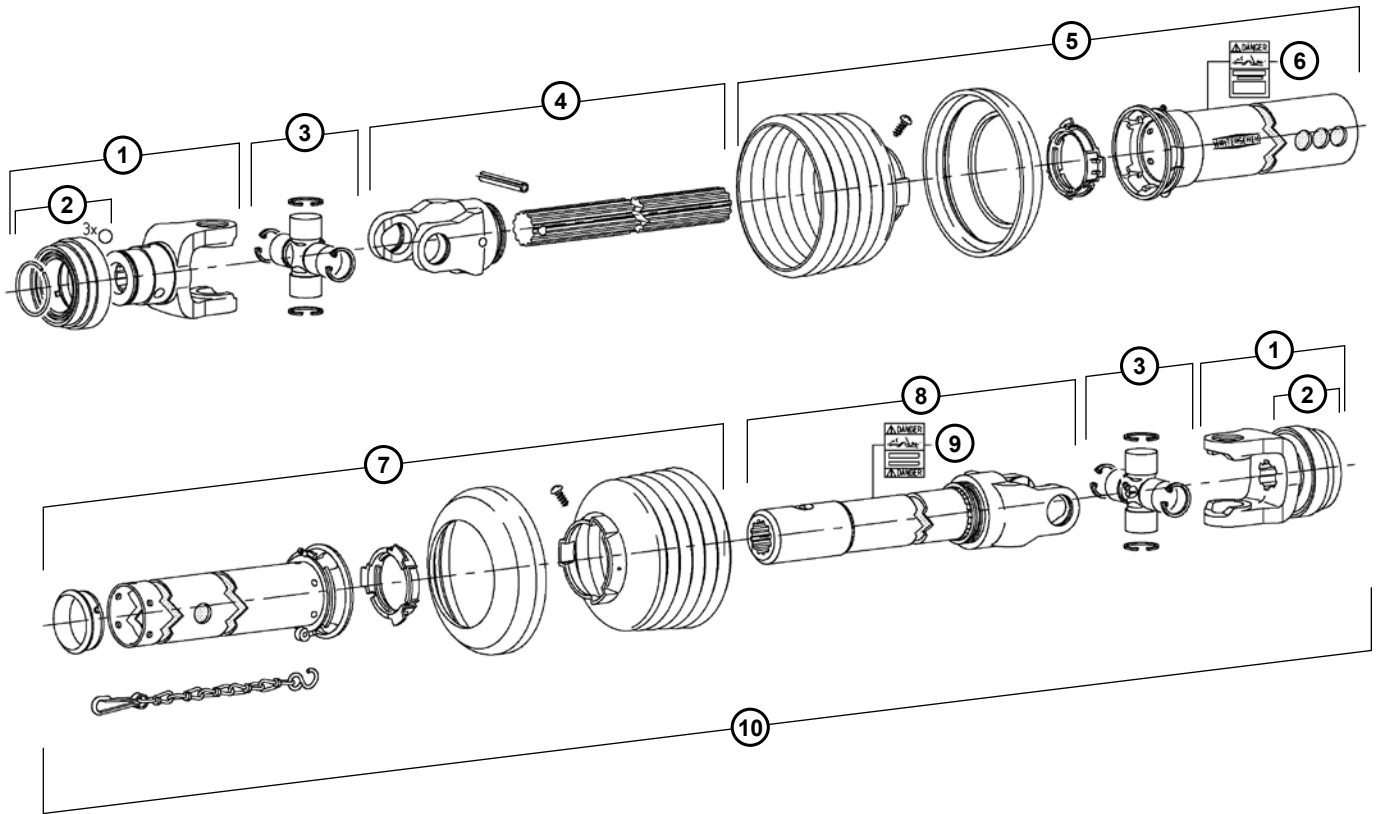


**Parts Overall View
Single Tower Style**

Item Number	Qty.	Qty. Shipped	Part Number	Description
1	2	1	5TIDC611102	Eccentric Locking Collar Bearings (hardware not included)
2	1	1	5TIDC611103	Hydraulic Cylinder
3	1	1	5TIDC611107	Jack
4	1	1	5TIDC611108	Cat #2 Top Link Pin w/ Lynch Pin
5	4	2	5TIDC611110	Hitch Tab Hardware
6	4	4	5TIDC611111	Bearing Hardware
7	4	2	5TIDC611113	Disc Caddy Hitch Adjustment Beam Hardware
8	8	4	5TIDC611115	PTO Shield Hardware
9	1	1	5TIDC611118	Hydraulic Cylinder Safety Stop w/ Clinch Pin
10	2	1	5TIDC611138	Disc Caddy Hydraulic Hose End Attachment
11	8	8	5TIDC611122	Frame Plate Hardware
12	1	1	5TIDC611130	Disc Caddy Frame
13	1	1	5TIDC611141	Single Tower Disc Caddy Mount Assy w/PTO Shield Plates (Rev B)
14	1	1	5TIDC611132	Disc Caddy Hitch Clevis Tongue
15	2	1	5TIDC611134	Disc Caddy Hitch Tab
16	1	1	5TIDC611135	Rear Frame and Axle Attachment (Frame & Spindle Only)
17	3	1	TIFC711207	Red Reflector Decal
18	2	1	5TIDC611119	Weight Retaining Bar w/ R-Pin
19	1	1	5TIDC611133	Disc Caddy Hitch Adjustment Beam

Use this parts list if serial number is before XFDC10X001400.

PARTS

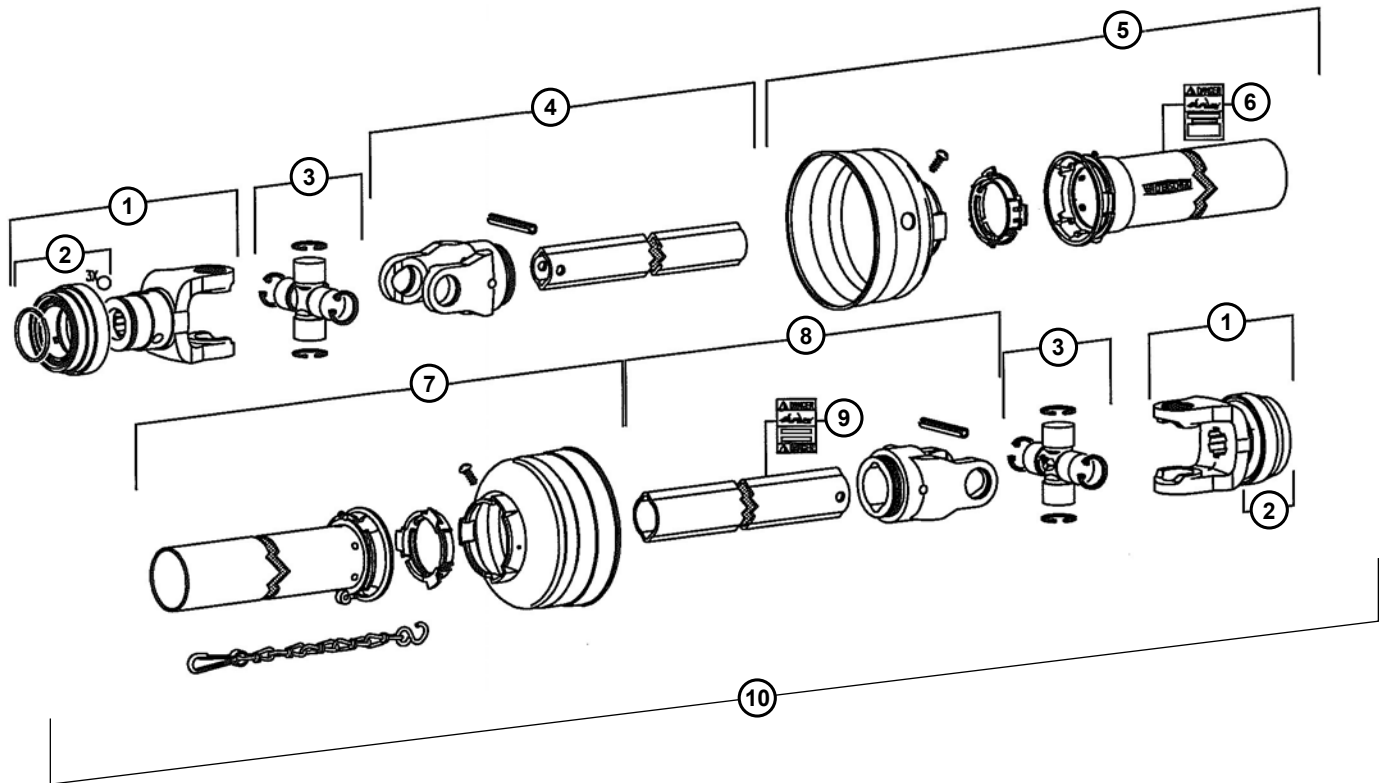


PTO Driveline Assembly Double Tower Style

Item Number	Qty.	Qty. Shipped	Part Number	Description
1	1	1	5TIDC611155	Yoke ASGE
2	1	1	TIFC711178	ASGE Collar Kit
3	2	2	5TIDC611156	Cross & Bearing Kit (2pk)
4	1	1	5TIDC611157	Inner Pinned Assembly
5	1	1	5TIDC611158	Outer Shield Kit
6	1	1	TIFC711179	Decal Outer
7	1	1	5TIDC611159	Inner Shield Kit
8	1	1	5TIDC611160	Outer Pinned Assembly
9	1	1	TIFC711180	Decal Inner
10	1	1	5TIDC611145	610MM 20 Spline PTO Shaft

28 Parts

PARTS



**PTO Driveline Assembly
Single Tower Style**

Item Number	Qty.	Qty. Shipped	Part Number	Description
1	1	1	5TIFC711233	Yoke ASGE
2	1	1	TIFC711178	ASGE Collar Kit
3	2	2	5TIFC711234	Cross and Bearing Kit
4	1	1	5TIDC611126	Inner Pinned Assembly
5	1	1	5TIDC611127	Outer Shield Kit
6	1	1	TIFC711179	Decal Outer
7	1	1	5TIDC611128	Inner Shield Kit
8	1	1	5TIDC611129	Outer Pinned Assembly
9	1	1	TIFC711180	Decal Inner
10	1	1	5TIDC611104	60" PTO Shaft

TORQUE SPECIFICATIONS

Proper torque for American fasteners used on manufactured implement.
Recommended Torque in Foot Pounds (Newton Meters).*

AMERICAN

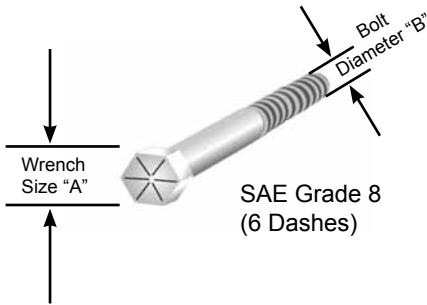
Bolt Head Markings



SAE Grade 2
(No Dashes)



SAE Grade 5
(3 Dashes)

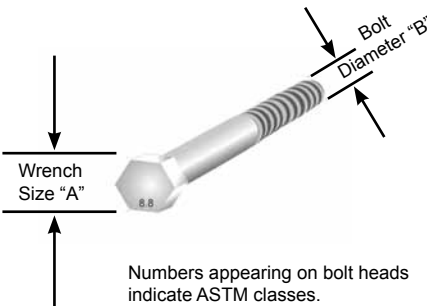


SAE Grade 8
(6 Dashes)

WRENCH SIZE(IN.) "A"	BOLT DIAMETER (IN.) "B" AND THREAD SIZE	SAE GRADE 2	SAE GRADE 5	SAE GRADE 8
7/16	1/4 -20 UNC	6 (7)	8 (11)	12 (16)
7/16	1/4 - 24 UNF	6 (8)	10 (13)	14 (18)
1/2	5/16 -18 UNC	11 (15)	17 (23)	25 (33)
1/2	5/16 - 24 UNF	13 (17)	19 (26)	27 (37)
9/16	3/8 - 16 UNC	20 (27)	31 (42)	44 (60)
9/16	3/8 -24 UNF	23 (31)	35 (47)	49 (66)
5/8	7/16 -14 UNC	32 (43)	49 (66)	70 (95)
5/8	7/16 - 20 UNF	36 (49)	55 (75)	78 (106)
3/4	1/2 - 13 UNC	49 (66)	76 (103)	106 (144)
3/4	1/2 - 20 UNF	55 (75)	85 (115)	120 (163)
7/8	9/16 -12 UNC	70 (95)	109 (148)	153 (207)
7/8	9/16 - 18 UNF	79 (107)	122 (165)	172 (233)
15/16	5/8 - 11 UNC	97 (131)	150 (203)	212 (287)
15/16	5/8 - 18 UNF	110 (149)	170 (230)	240 (325)
1-1/8	3/4 - 10 UNC	144(195)	266 (360)	376 (509)
1-1/8	3/4 - 16 UNF	192 (260)	297 (406)	420 (569)
1-5/16	7/8 - 9 UNC	166 (225)	430 (583)	606 (821)
1-5/16	7/8 - 14 UNF	184 (249)	474 (642)	668 (905)
1-1/2	1-8 UNC	250 (339)	644 (873)	909 (1232)
1-1/2	1 - 12 UNF	274 (371)	705 (955)	995 (1348)
1-1/2	1-14 UNF	280 (379)	721 (977)	1019 (1381)
1-11/16	1-1/8 - 7 UNC	354 (480)	795 (1077)	1288 (1745)
1-11/16	1-1/8 -12 UNF	397 (538)	890 (1206)	1444 (1957)
1-7/8	1-1/4 - 7 UNC	500 (678)	1120 (1518)	1817 (2462)
1-7/8	1-1/4 - 12 UNF	553 (749)	1241 (1682)	2013 (2728)
2-1/16	1-3/8 - 6 UNC	655 (887)	1470 (1992)	2382 (3228)
2-1/16	1-3/8 -12 UNF	746 (1011)	1672 (2266)	2712 (3675)
2-1/4	1-1/2 - 6 UNC	870 (1179)	1950 (2642)	3161 (4283)
2-1/4	1-1/2 - 12 UNF	979 (1327)	2194 (2973)	3557 (4820)

METRIC

Proper torque for metric fasteners used on manufacturer implement.
Recommended Torque in Foot Pounds (Newton Meters).*



*Use 75% of the specified torque value for plated fasteners. Use 85% of the specified torque values for lubricated fasteners.

WRENCH SIZE (mm) "A"	BOLT DIA. (mm) "B"	ASTM 4.6	ASTM 8.8	ASTM 9.8	ASTM 10.9
8	5	1.8 (2.4)		5.1 (6.9)	6.5 (8.8)
10	6	3 (4)		8.7 (12)	11.1 (15)
13	8	7.3 (10)		21.1 (29)	27 (37)
16	10	14.5 (20)		42 (57)	53 (72)
18	12	25 (34)	74 (100)	73 (99)	93 (126)
21	14	40 (54)	118 (160)	116 (157)	148 (201)
24	16	62 (84)	167 (226)	181 (245)	230 (312)
30	20	122 (165)	325 (440)		449 (608)
33	22		443 (600)		611 (828)
36	24	211 (286)	563 (763)		778 (1054)
31	27		821 (1112)		138(1542)
46	30	418 (566)	1119 (1516)		1547(2096)

NOTES

**PART NUMBER
5TIDC611125**

